PLN 01-FEB-2001

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Submitted (11-MAR-1999) Shin-ichi Ayabe, Nihon University, Submitted (11-MAR-1999) Shin-ichi Ayabe, Nihon University, Department of Applied Biological Science: Kameino 1866, Fujisawa, Kanagawa 252-8510, Japan (E-mail:ayabe@brs.nihon-u.ac.jp, Tel:81-466-84-3703, Fax:81-466-80-1141)
                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Viridiplantae; Streptophyta; Embryophyta; Tracheophy
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
Rosidae; eurosids I; Fabales; Fabaceae; Papilionoideae; Loteae;
                                    1641 GTTCCAAGGGCACATAACCTCATCTGTGTCCGGTTGCAAGATCAAGTGCCGTACCCAAA 1700
                                                                                                                                                                                                                                                                                                                                                                                                    Lotus japonicus (strain:Gifu) root cDNA to mRNA, clone:LjCYP-1. Lotus japonicus
                                                                                                                             155 GTTCCAAGGGCACATAACCTCATCTGTGTCCCGGTTGCAAGATCAAGTGCCGTACCAAA 214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Induction of isoflavonoid pathway in the model legume Lotus japonicus: molecular characterization of enzymes involved in phytoalexin biosynthesis
35 ATGGCCACACTGCTTGCGTCAGTTATCCAGTGCTTTGATCTCAGCGTAGTGGGCCCACAG 94
                                                                                                                                                                                                                                                                                                       Lotus japonicus mRNA for cytochrome P450, complete cds. AB024931
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/note="Lotus corniculatus var. japonicus"
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Shimada,N., Akashi,T., Aoki,T. and Ayabe,S.
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/strain="Gifu"
/db_xref="taxon:34305"
/clone="LjCYP-1"
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/protein_id="BAA93632.1"
/db_xref="G1:7415992"
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Shimada, N., Aoki, T. and Ayabe, S.
Direct Submission
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Cloning of cytochrome P450 cDNAs from cultured Glycyrrhiza echinata
L. cells and their transcriptional activation by elicitor-treatment
Plant Sci. 126, 39-47 (1997)
Location/Qualifiers
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/product="cytochrome P450"
/protein_id="BaA13956.1"
/db_xref="G1:1845569"
/translation="MCPGVNLATAGMATLLASVIQCFDLSVVGPQGKILKGNDAKVSMEBRAGLTVPRAHNLICYVRRSSAPEKLFSS"
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Glycyrrhiza echinata mRNA for cytochrome P450, clone Ge-8, partial
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Glycyrchiza echinata
Glycyrchiza echinata
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae; eurosids I; Fabales; Fabaceae; Papilionoideae; Galegeae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (20-NOV-1996) Shin-ichi Ayabe, Nihon University, Department of Applied Biological Science; Kameino 1866, Fujisawa, Kanagawa 252-8510, Japan (E-mail:ayabe@brs.nihon-u.ac.jp, rel:81-466-84-3703, Fax:81-466-80-1141)
                                                                1621 AAGAGAGGCTGGACTCCACGGTTCCAAGGCCACATAACCTCATCTGTGTCCCGGTTGCAA 1680
                                                                                                                       GACAATGATACCCCATATATCATCTTCGCGACTAGTCTCTTTGGTACAGTATGTTGTAA 1860
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Akashi,T., Aoki,T., Takahashi,T., Kameya,N., Nakamura,I. and
                                GATCAAGTGCCGTACCCAAACTCTTTTCGTCGTAAAACATACGCGCGACACAGAAAGCT
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/clone_lib="lambda ZapII"
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Organisma"Glycyrrhiza echinata"
/db_xref="taxon:46348"
/clone="Ge-8"
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Direct Submission
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VGHLHLLDOPLLHNSIKLGEKYGPLYTLYFGSMPTVVASTPELFKLFLQTHEATSFS
TREOTSALRKLTYDNSVAMVPFPAPVKRF IRKVIMNDLANATTWKLRPLEKSGEIRKVL
KAMAQSAESOKPLNYTEELLKWTNSTISRMMLGEAEHVKDIVREVLKIFGESYSLTDFI
WPLKKLRVGOYEKRLDEFINKEDPYIEKVIKKROEIIKRRKENGELEEGEOSVVFLD
TLLEYAADBMETKITKEOYRGEVYDFFSAGTOSTAVATWARALAELINRFYLKKÄRRE
EVDSVVGKDRLVDESDIQNLPYIRAIVKETFRHHPPLLPVVRRCVQECELNGYYIPEG
ALVLENVARAQUEGENGYTPERFERFLEEADIDLKGQHFELLPFGSGRRWCFGVNL
ATRAMATALENVERGYBERFERFLEEADIDLKGGHFELLPFGSGRRWCFGVNL Length 1557; Indels ö 1.8%; Score 35; DB 8; I 100.0%; Pred. No. 2.7e-08; 390 GCCTCCACCCTGAACTTTTCAAACTCTTCCTCCA 424 0; Mismatches 385 365 9 δλ ATGGCCACACTGGTTGCGTCAGTTATCCAGTGCTTTGATCTAGCGTAGTGGGCCCACAG 1580

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Location/Qualifiers
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
Rosidae; eurosids I; Fabales; Fabaceae; Papilionoideae; Galegeae;
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                           1621 AAGAGAGAGCTGGACTCACGGTTCCAAGGGCACATAACCTCATCTGTGTCCCGGTTGCAA 1680
                                                                             1681 GATCAAGTGCCGTACCCAAACTCTTTTCGTCGTAAAACATACGCGCGACACCAGAAAGCT 1740
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Glycyrrhiza echinata suspension-cultured cells cDNA to mRNA,
clone_lib:lambda ZapII clone:Ge-8.
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100.0%; Pred. No. 3.7e-113;
ive 0; Mismatches 0;
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/db_xref="taxon:46348"
/clone="Ge-8"
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KAMAQSAESQKPLINYTEELLKWTNSTISRMGLGEAEHVKDIVREVLK ITGEKSETDEI
WPLKKLKYGGYEKRIDEIFNKEPPYIEKVIKKRGEITRRKERNGELEEGGSVYPELD
TILLEYAADENMEIKITKEPINKEPYTERSAGTDSTAVATDMALAELINNPKVLKKARE
EVDSYVGKDRLYDESDIQALPYIRAIVKEFFRMHPPLPVVKRKCVQECELNGYVIPEG
ALVLENWANQRDPKYWKTPLEFRPERFLEEADIDLKGQHFELLPFGSGRRMCPGVNL
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VGHLHILLDQPLLHNSLIKLGEKYGPLYTLYFGSMPTVVASTPELFKLFLQTHEATSFS
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Lotus japonicus
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophy
Spermatophyta; Magnollophyta; eudicotyledons; core eudicots;
Rosidae; eurosids I; Fabales; Fabaceae; Papillonoideae; Loteae;
                                          GITCCAAGGGCACATAACCICAICIGIGICCCGGTIGCAAGAICAAGIGCCGIACCCAAA 1700
                                                                  Gaps
35 ATGGCCACACTCCTTGCGTCAGTTATCCAGTGCTTTGATCTCAGCGTAGTGGGCCCACAG 94
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Shimada,N., Akashi,T., Aoki,T. and Ayabe,S.
Induction of isoflavonoid pathway in the model legume Lotus
japonicus: molecular characterization of enzymes involved in
phytoalexin biosynthesis
Plant science (Shannon, Ireland) 160 (1), 37-47 (2000)
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100.0%; Pred. No. 2.7e-08;
ive 0; Mismatches 0;
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                                                                                                                                                                                                                                  CTCTTTTCGTCGTAAACATACGCGCGACACCA 1733
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Best Local Similarity
Matches 35; Conserva
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